

Automation software

## **Concept v2.6**

The *flexible* IEC 61131-3  
development environment  
to *optimize* PLC performance



## *Simply Smart !*

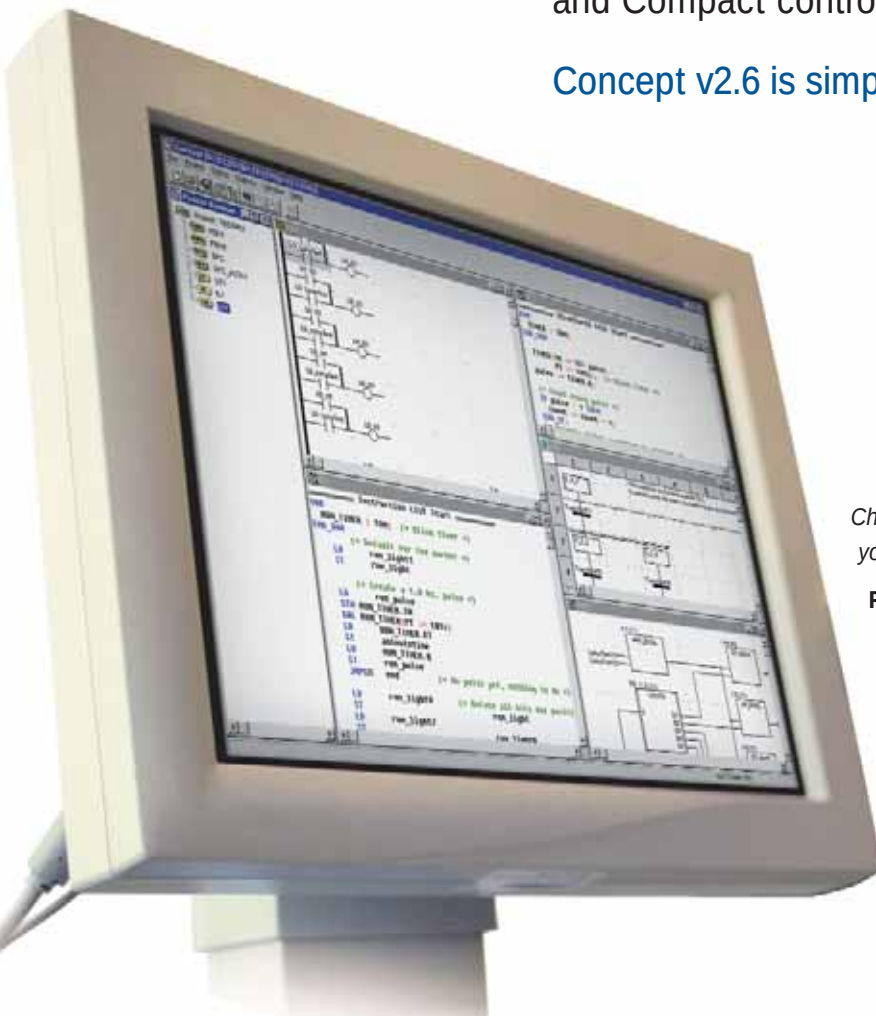
Leveraging  
**ingenuity**  
and intelligence  
for **ease of use**.

# Programming software

that **unlocks** the benefits  
of **integrated** automation **solutions**

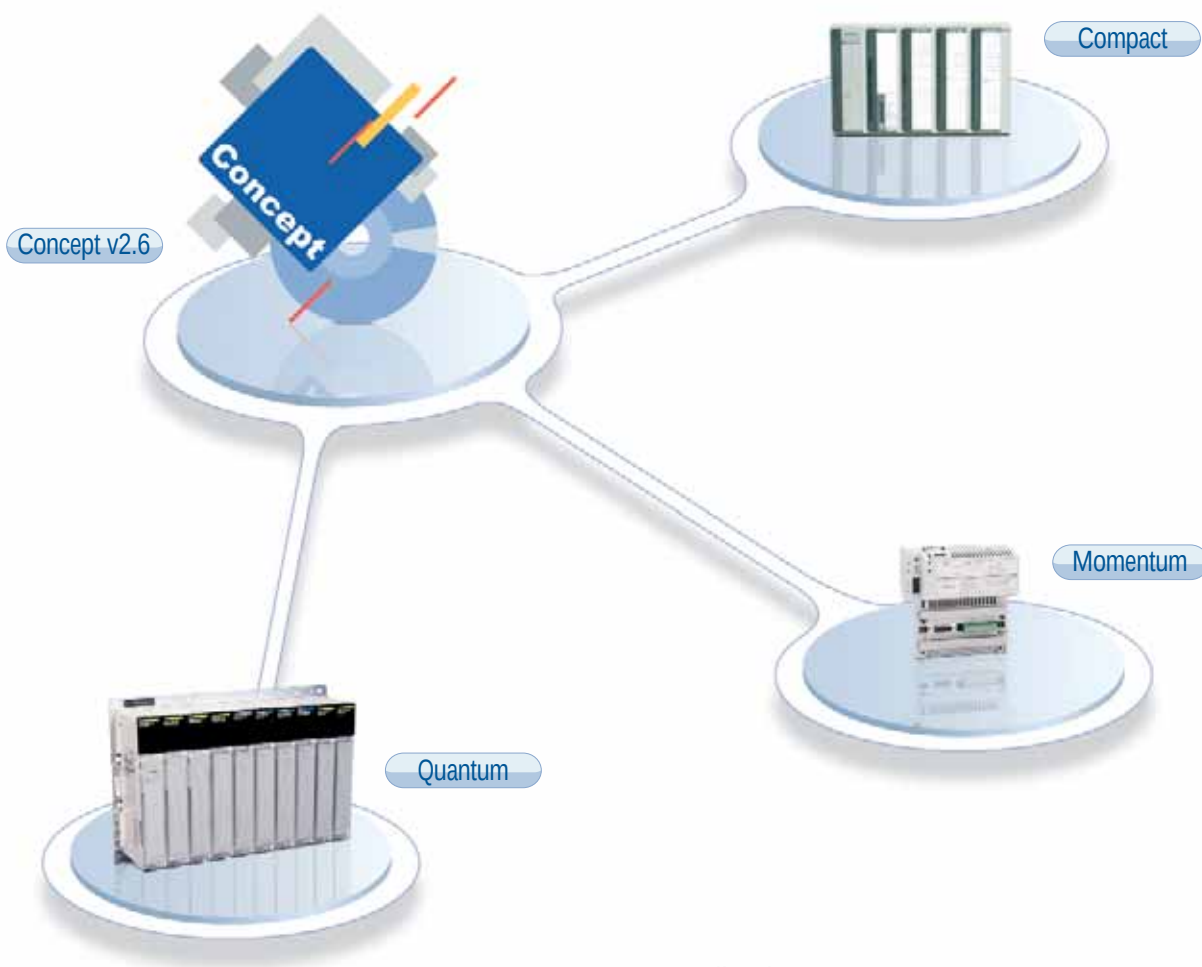
Concept v2.6 is the *flexible* IEC 61131-3  
programming software specifically designed to  
deliver optimal performance and *ease* of use  
from your Modicon Quantum, Momentum,  
and Compact controllers.

Concept v2.6 is simply the smart choice



*Choose the environment that best suits  
your application and your engineering expertise.*

Function Block Diagram (FBD)  
Ladder Diagram (LD)  
Sequential Function Chart (SFC)  
Structured Text (ST)  
Instruction List (IL)



### One application, custom features

Schneider Electric's Concept software provides users with an advanced Microsoft Windows based toolset that delivers a multilanguage development environment for control system programming.

### Process productivity

Concept's five IEC editors are the main tools on the integrated programming palette that give users the freedom to choose the programming language that fits their application requirements. Schneider's IEC software utilizes structured programming to optimize variable usage as well as reduce software design time and maintenance costs.

### Multi-level password protection

Concept provides up to nine levels of software access through easy-to-use configuration screens. This delivers the flexibility to assign multiple levels of password security, and reduces the chance for unauthorized changes to projects or DFBs.

# Smart features for improved productivity

## Simple

### Upload IEC programs

Users can simply turn on a preference in the code generation menu to include upload information and Concept will store your IEC program and all the tag names in the PLC. This enables the transfer of previously loaded Concept IEC programs from the PLC to the programming device.

As an additional feature, Concept offers the unique option to store your variable and section comments in the PLC.

Using familiar, standardized editors bundled in a single application, users can create and integrate PLC control, communication and diagnostic logic.

## Ingenious

### Reuse objects

Concept's multi-language development environment enables programmers to create standard libraries of Derived Function Blocks (DFBs). Concept allows multiple instances of DFBs in an application program. These DFBs can be written in Ladder Diagram, Function Block Diagram, Structured Text or Instruction List languages. If a particular algorithm or standard piece of control logic needs to be modified, the change is performed once and Concept automatically performs any modifications for each copy of the DFB.

### Export and import

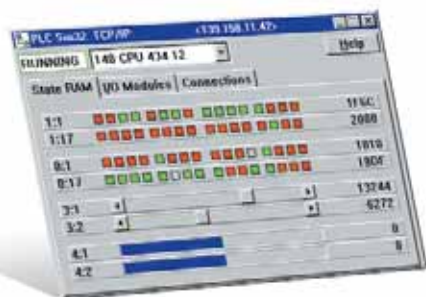
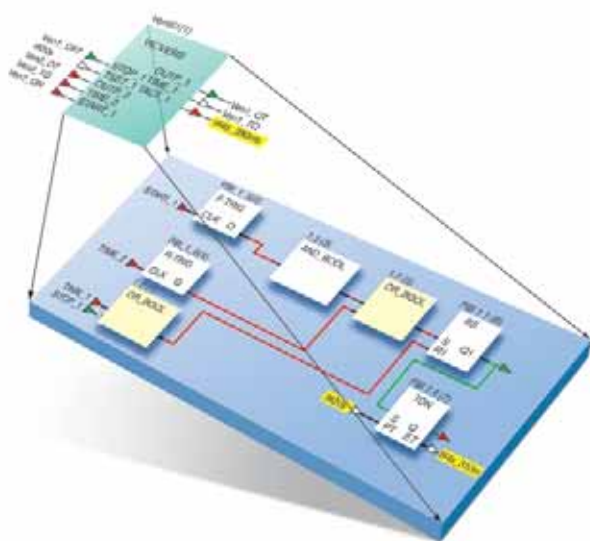
To meet customer needs for streamlined programming, Concept offers macros that duplicate frequently used code segments or sections with modified variable names. Users can export/import complete projects, sections, variable list, or configuration information from/to other Concept applications.

### Simulate first, install second

Schneider's testing and diagnostic simulation tools help users achieve significantly faster results in every phase of application development from specification to implementation.

### Security

Once up and running, Hot Standby solutions manage automatic, instantaneous switching from the main CPU to a secondary CPU. The Hot-Standby functionality available on Schneider's Quantum platform is an integrated part of Concept and does not require any special programming.





## *Open*

Broad-based industry acceptance of IEC 61131-3 means users have a common set of languages to work with that act as a foundation. This common foundation delivers optimal flexibility between programs as well as the interoperability to work between vendors.

## *Data mining*

Concept's performance features are significantly enhanced by the high level of compatibility it has with other Schneider products. Example – Users can access Concept tag names via Schneider Electric's OPC Factory Server (OFS). The OFS tool provides direct database access to all Concept variables – located and unlocated, elementary and structured, and displays them as OPC objects. This means any OPC Client (e.g. VisualBasic) has easy online read/write control of critical PLC data. Access to this kind of data makes Concept a crucial component in HMI, SCADA, MES, and ERP systems.

## *Subscription Service (formerly CSP)*

With your purchase of Concept v2.6, you will automatically receive free software updates for a full year, giving you the latest Concept revisions to keep your software at its highest productivity. Software registration required to activate the service.

## *Flexibility for a wide range of industries and applications*

Its flexibility and high level of performance make Concept v2.6 especially well suited for a wide variety of applications. Combined with the power of Quantum it is the ideal solution for process control solutions in Food & Beverage, Oil & Gas, and Pharmaceutical, and the distributed intelligence and distributed I/O capabilities of Momentum are ideal for many different kinds of discrete manufacturing and conveying applications.





## Smart solutions for your Quantum-based pharmaceutical and food & beverage solutions

### Enhanced security to support 21 CFR part 11 systems

As the demands for control and documentation from regulatory agencies become more stringent, Concept v2.6 offers important new features that will allow users in the pharmaceutical and food & beverage industries to design and operate a Modicon Quantum control system that complies with 21 CFR part 11 (434A and 534A controllers only).

- *Password Dialog* for enhanced operational security.
- *Write Restriction List* distinguishes Modbus Plus addresses that have only "Read" access from those that have "Write" access.
- *Auto-Logout* allows setting a variable Auto-Logout time in the Quantum controller when no activity takes place for a specified period of time (ex. "download," "download change," etc.). After the connection has been reset a user must reconnect to the Quantum controller.
- *Log-File Encryption* allows automatic encryption of the log-file.
- *Secure Application Flag* for each separate project which indicates that logging and log-file encryption is automatically enabled.



**NOTE 1:** In most cases the executive of Quantum 434A/534A controllers must be upgraded to the latest version to benefit from these new features.

**NOTE 2:** Use of Concept v2.6 does not inherently imply compliance with CFR 21 11. For complete details, please refer to Schneider User Manual 840 USE 200 00 version 1.0 — Schneider Electric Security Features for 21 CFR Part 11 Compliance. You should also visit the FDA web site at [http:// www.fda.gov/ora/compliance\\_ref/part11/](http://www.fda.gov/ora/compliance_ref/part11/)



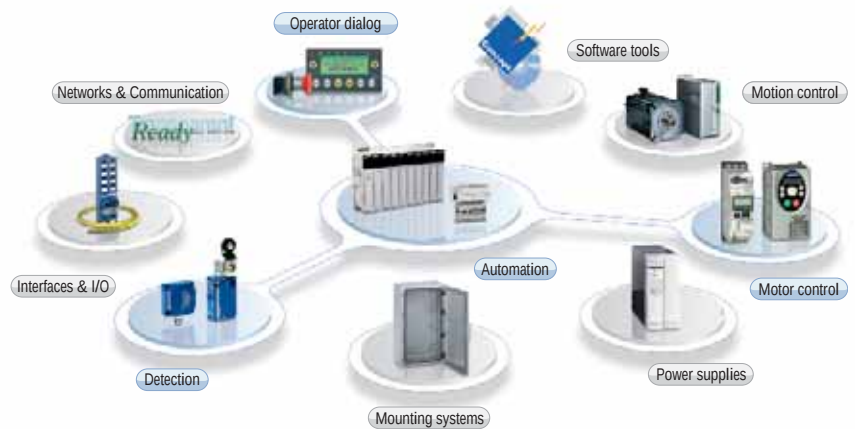
# Product references and specifications



| Supported PLC Platforms           | Quantum                                                                                                                                                                                                                                                                                                                                                                                                                       | Momentum                                                                                                                                                                                                                                                                                                                                                                                                      | Compact     |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
|                                   | 140 CPU 113 02                                                                                                                                                                                                                                                                                                                                                                                                                | 171 CCS 700 00                                                                                                                                                                                                                                                                                                                                                                                                | PC E984 258 |
|                                   | 140 CPU 113 03                                                                                                                                                                                                                                                                                                                                                                                                                | 171 CCS 700 10                                                                                                                                                                                                                                                                                                                                                                                                | PC E984 265 |
|                                   | 140 CPU 213 04                                                                                                                                                                                                                                                                                                                                                                                                                | 171 CCS 760 00                                                                                                                                                                                                                                                                                                                                                                                                | PC E984 275 |
|                                   | 140 CPU 424 02                                                                                                                                                                                                                                                                                                                                                                                                                | 171 CCS 780 00                                                                                                                                                                                                                                                                                                                                                                                                | PC E984 285 |
|                                   | 140 CPU 434 12                                                                                                                                                                                                                                                                                                                                                                                                                | 171 CCC 760 10                                                                                                                                                                                                                                                                                                                                                                                                |             |
|                                   | 140 CPU 534 14                                                                                                                                                                                                                                                                                                                                                                                                                | 171 CCC 780 10                                                                                                                                                                                                                                                                                                                                                                                                |             |
|                                   | 140 CPU 434 12 A                                                                                                                                                                                                                                                                                                                                                                                                              | 171 CCC 960 20                                                                                                                                                                                                                                                                                                                                                                                                |             |
|                                   | 140 CPU 534 14 A<br>and derivatives thereof.                                                                                                                                                                                                                                                                                                                                                                                  | 171 CCC 960 30<br>171 CCC 980 20<br>171 CCC 980 30                                                                                                                                                                                                                                                                                                                                                            |             |
| Operating Systems                 | Windows 98, Windows NT 4.0 SP5 or higher, Windows 2000 Professional, and Windows XP Professional                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                               |             |
| Communications                    | Support of Modbus, Modbus Plus, and Modbus TCP (10/100 Mbit/s)                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                               |             |
| IEC Language Editors              | Free Graphic Editors:                                                                                                                                                                                                                                                                                                                                                                                                         | Text Editors:                                                                                                                                                                                                                                                                                                                                                                                                 |             |
|                                   | Function Block Diagram (FBD) /<br>PLCopen Base Level compliant,<br>Sequential Function Chart (SFC)<br>Ladder Diagram (LD)                                                                                                                                                                                                                                                                                                     | Structured Text (ST) / PLCopen Base Level compliant<br>Instruction List (IL) / PLCopen Base Level compliant                                                                                                                                                                                                                                                                                                   |             |
| Non-IEC Language                  | 984 Ladder Logic (984LL)                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                               |             |
| Included Function Block Libraries | IEC (Arithmetic, Bistable, Compare, Converter, Counter, Edge detection, Logic, Numeric, Select, Timer)<br>EXTENDED (Arithmetic, Converter, ... )<br>SYSTEM (System based FFB library)<br>ANA_IO (Analog I/O, Configuration)<br>CONT_CTL (Closed Loop Control)<br>FUZZY (Fuzzy Logic)<br>DIAGNO (Process Diagnosis)<br>COMM (IEC Communication)<br>EXPERTS (FFB library for Expert Modules)<br>LIB984 (984 Ladder Logic FFB's) |                                                                                                                                                                                                                                                                                                                                                                                                               |             |
| Basic Feature Set                 | Online help<br>Symbolic addressing<br>Powerful search functions<br>Variable editor<br>Derived Data Types<br>Debugging support                                                                                                                                                                                                                                                                                                 | Code encapsulation<br>Online data visualization<br>Derived Function Blocks<br>Re-use of code/programs<br>Excellent documentation capabilities                                                                                                                                                                                                                                                                 |             |
| Security                          | Protection of Projects<br>Protection of Derived Function Blocks<br>Multiple levels of password protection are possible                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                               |             |
| Product References                | 372SPU47101V26<br>372SPU47201V26<br>372SPU47401V26<br>372SPU47701V26<br>Upon installation, the user can select one of the following languages: English, French, German, or Spanish                                                                                                                                                                                                                                            | Concept S<br>Concept M<br>Concept XL (Multi-user licenses available.)<br>Concept Application Loader                                                                                                                                                                                                                                                                                                           |             |
| Related products                  | 332SPU47001V26<br><br>372HVA16030V25<br>372SFV16000V30                                                                                                                                                                                                                                                                                                                                                                        | Concept EFB Toolkit (comes with a C-Compiler to allow the creation of customized EFBs. The newly created EFBs can be installed into Concept and used like all original EFBs (AND, OR, CTU, ...).<br>HVAC Library 2.5 (an EFB library for common HVAC applications).<br>SFC View 3.0 (an ActiveX control to display status information on an Operator Station concerning all SFC sections running in the PLC). |             |

# The efficiency of Telemecanique branded *solutions*

Used in combination, Telemecanique products provide quality solutions, meeting all your **Automation & Control** applications requirements.



## A worldwide presence

### Constantly available

- More than 5 000 points of sale in 130 countries.
- You can be sure to find the range of products that are right for you and which complies fully with the standards in the country where they are used.

### Technical assistance wherever you are

- Our technicians are at your disposal to assist you in finding the optimum solution for your particular needs.
- Schneider Electric provides you with all necessary technical assistance, throughout the world.



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